

Amendments to the Specification:

Please replace paragraph beginning on page 4, line 14 with the following amended paragraph:

It is desirable for the following conditions (1), (2) and (3) to be satisfied:

- (1)  $r_1 \geq b \times \tan\theta_1$
- (2)  $(a-c)\tan\theta_1 = r_2$   $(a-c)\tan\theta_2 = r_2$
- (3)  $\theta_3 \geq \theta_2$

wherein "a" designates the image distance of the positive lens; "b" designates the object distance of the positive lens; "c" designates the distance between a principle plane of the positive lens and the incident end face of the fiber-optic light guide; " $r_1$ " designates the radius of the positive lens; " $r_2$ " designates the radius of the incident end face of the fiber-optic light guide; " $\theta_1$ " designates the exit angle of the light rays emitted from the white LED; " $\theta_2$ " designates the angle of incidence of light rays which emerge from the positive lens to be incident on the incident end face of the fiber-optic light guide; and " $\theta_3$ " designates the threshold angle of incidence of light rays on the incident end face which are transmittable through the fiber-optic light guide.

Please replace paragraph beginning on page 14, line 1 with the following amended paragraph:

A lens holder 28 which holds a positive lens 29 is fixed to the front of the LED holder 27a so that the optical axis of the positive lens 29 is coincident with the optical axis of the white LED 27 having a predetermined distance therebetween along the optical axis (see Figures 2, 6, 7). Note that the lens holder 28 which holds the positive

lens 29 is not shown in Figures 4, 5 and 7. The positive lens 29 has a light-gathering power which is determined in consideration of the numerical aperture (NA) of the fiber-optic light guide 17 so that the fiber-optic light guide 17 can receive almost all the light rays emitted from the white LED 27 through the incident end face 17a. The following conditions (1), (2) and (3) are satisfied:

$$(1) \quad r_1 \geq b \times \tan \theta_1$$

$$(2) \quad \underline{(a-c)\tan\theta_1=r_2} \quad \underline{(a-c)\tan\theta_2=r_2}$$

$$(3) \quad \theta_3 \geq \theta_2$$

wherein "a" represents the image distance of the positive lens 29;  
"b" designates the object distance of the positive lens 29;  
"c" designates the distance between a principle plane of the positive lens 29 and the incident end face 17a of the fiber-optic light guide 17;  
"r<sub>1</sub>" designates the radius of the positive lens 29;  
"r<sub>2</sub>" designates the radius of the incident end face 17a of the fiber-optic light guide 17;  
"θ<sub>1</sub>" designates the exit angle of the light rays emitted from the white LED 27;  
"θ<sub>2</sub>" designates the angle of incidence of the light rays which emerge from the positive lens 29 to be incident on the incident end face 17a of the fiber-optic light guide 17; and  
"θ<sub>3</sub>" designates the threshold angle of incidence of the light rays on the incident end face 17a which are transmittable through the fiber-optic light guide 17.

Please replace paragraph beginning on page 15, line 21 with the following amended paragraph:

The angle of incidence  $\theta_2$  of the light rays which emerge from the positive lens 29 to be incident on the incident end face 17a of the fiber-optic light guide 17 is determined by the exit angle  $\theta_1$  of the light rays emitted from the white LED 27, the object distance b of the positive lens 29 and a focal length f which is characteristic of the positive lens 29. The exit angle  $\theta_1$  is a characteristic value of the white LED 27. Since the radius " $(a-c)\tan\theta_2$ " of the light rays at the incident end surface 17a which emerge from the positive lens 29 to be incident on the incident end surface 17a is determined if the aforementioned values "a", "c" and " $\theta_2$ " are determined, the radius " $(a-c)\tan\theta_1$ " " $(a-c)\tan\theta_2$ " can be made to be equal to the aforementioned radius " $r_2$ " by adjusting the aforementioned distance "c". This makes it possible for the fiber-optic light guide 17 to capture light rays emerging from the positive lens 29 with efficiency.